



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,558	03/29/2004	Efraim Atad	27613	1235
67801 7590 09/16/2008 MARTIN D. MOYNIHAN d/b/a PRTSI, INC. P.O. BOX 16446 ARLINGTON, VA 22215				
EXAMINER				
RYAN, PATRICK A				
ART UNIT		PAPER NUMBER		
2623				
MAIL DATE		DELIVERY MODE		
09/16/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,558

Applicant(s)

ATAD ET AL.

Examiner

PATRICK A. RYAN

Art Unit

2623

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 4-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 09/11/2008

DETAILED ACTION

1. This Office Action is made in response to Amendment—After Non-Final Rejection filed June 5, 2008 ("Response"). Applicant has amended Claims 1, 9, and 17; has canceled Claim 3; and has added Claim 25. As amended, Claims 1, 2, and 4-25 are presented for examination.

Miscellaneous

2. Applicant is advised that the Examiner of record for this application has changed.

Claim Objections

3. Claim 1 is objected to because of the following informalities: the limitation "said terrestrial receivers" lacks antecedent basis because Claim 1 does not recite a terrestrial receiver. Claim 1 recites "a satellite receiver" and "a terrestrial antenna". Therefore, for the purpose of this Office Action, the Examiner will interpret Claim 1 to read "wherein said satellite receiver and said terrestrial antenna are each connected..." Appropriate correction is required.

Response to Arguments

4. Applicant's arguments with respect to Claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 5-11, 13-18, and 20-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Mehravari, United States Patent Application Publication (2003/0133413 A1, Of Record), in view of Perlman United States Patent Application Publication (2004/0110463 A1).

7. In regards to Claim 1, Mehravari teaches a TV receiver installation comprising a satellite receiver for receiving a broadcast multi-channel feed from a satellite relay (Satellite Dish Receiver 518 receiving information from Satellite 517, as shown in Fig. 4 and described in Paragraph [0049], with further reference to Paragraph [0022]), and a terrestrial antenna (Antenna 620 of Fig. 6 that radiates and receives communications signals to and from Wireless Devices 230 in a high-speed wires wide-area or neighborhood system, as disclosed in Paragraphs [0059,0060]). In addition, Antenna can be affixed in various locations around the user's location, as disclosed in Paragraph [0059]). Mehravari teaches Satellite Transceiver 519, connected to Satellite Dish 518, for transmitting and receiving information in communication with two-way high speed data service provided by Satellite Infrastructure 505, as disclosed in Paragraphs [0049,0050].

Mehravari does not teach the satellite receiver and the terrestrial antenna, for handling a return link over a terrestrial network, associated with a splitter combiner unit configured to combine the satellite and the terrestrial network signals for sending together through the same cable.

In a similar field of invention, Perlman teaches an antenna assembly for receiving satellite signals and teaches a wireless communications transceiver that operates to transmit and receive video and data information within a surrounding area (Abstract). Perlman further teaches the communication of both satellite and terrestrial signals along the same Cable 20, as shown in Fig. 6 and described in Paragraph [0043]. Perlman also teaches the terrestrial antenna (Wireless Antenna 111 of Fig. 8) and the satellite receiver (elements 15, 16, 18, and 21 of Fig. 8) can be spliced into Cable 20 by way of Distribution Box 110, which acts as a splitter combiner unit (as shown in Fig. 8 and described in Paragraphs [0033,0034]; with further reference to Fig. 1 and Paragraphs [0024,0028,0029]).

Both Mehravari and Perlman teach devices for receiving both terrestrial and satellite communication signals (Satellite Transceiver 519 and Distribution Box 110, respectively) for transmitting and receiving information over the same cable (as described above). Perlman demonstrates the use of a terrestrial antenna and a satellite dish for providing both a video broadcast multi-channel feed and a bi-directional terrestrial signal from separate devices associated by the same cable. In view of Perlman's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the similar teachings of Mehravari to include a terrestrial

antenna and a satellite receiver on the same cable in order to reduce the cost of the over system by providing the data from each device to the same splitter combiner unit for transmitting through the same cable.

8. In regards to Claim 2, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 1, wherein said terrestrial antenna is further operable to handle a forward link over said terrestrial network (Perlman teaches Wireless Antenna 111, also referenced as Transceiver 71, that provides two-way data services, as disclosed in Paragraphs [0021,0032]).

9. In regards to Claim 5, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 1, further adapted to comprise a node of said network (Mehravari teaches Antenna 620 radiates and receives wireless communications signals to and from Wireless Devices 230, as shown in Fig. 4 and described in Paragraphs [0059,0060]).

10. In regards to Claim 6, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 1, further adapted to be a micro base station for a local hot spot (Mehravari teaches Antenna 620 radiates and receives wireless communications signals to and from Wireless Devices 230, as shown in Fig. 4 and described in Paragraphs [0059,0060]).

11. In regards to Claim 7, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 6, wherein said local hot spot conforms substantially to the IEEE 802.11 standard (Mehravari teaches Antenna 620 communicating with Wireless

Devices 230 using the IEEE 802.11 protocol, as described in Paragraphs [0059, 0060, 0064]).

12. In regards to Claim 8, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 1, being a rooftop installation (Mehravari teaches Satellite Dish 518, Antenna 620, and Satellite Transceiver 519 can be installed on a rooftop, as described in Paragraphs [0049,0059] and shown in Fig. 4).

13. In regards to Claim 9, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 1 further comprising a terrestrial receiver, for receiving a broadcast multi-channel terrestrial video feed (Perlman teaches Wireless Antenna 111, also referenced as Transceiver 71, can receive video transmissions over a terrestrial network, as described in Paragraphs [0021,0028,0032]).

14. In regards to Claim 10, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 9, wherein said terrestrial antenna is further operable to handle a forward link over said terrestrial network (Perlman teaches Wireless Antenna 111, also referenced as Transceiver 71, that provides two-way data services, as disclosed in Paragraphs [0021,0032]).

15. In regards to Claim 11, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 9, wherein said terrestrial antenna and said terrestrial receiver are each connected to a single connecting cable via a splitter combiner unit which is configured to combine video broadcast and terrestrial network signals for sending together through said cable (Perlman further teaches the communication of both satellite and terrestrial signals along the same Cable 20, as shown in Fig. 6 and

described in Paragraph [0043]. Perlman also teaches the terrestrial antenna (Wireless Antenna 111 of Fig. 8) and the satellite receiver (elements 15, 16, 18, and 21 of Fig. 8) can be spliced into Cable 20 by way of Distribution Box 110, which acts as a splitter combiner unit (as shown in Fig. 8 and described in Paragraphs [0033,0034]; with further reference to Fig. 1 and Paragraphs [0024,0028,0029]).

16. In regards to Claim 13, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 9, further adapted to comprise a node of said network (Mehravari teaches Antenna 620 radiates and receives wireless communications signals to and from Wireless Devices 230, as shown in Fig. 4 and described in Paragraphs [0059,0060]).

17. In regards to Claim 14, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 9, further adapted to be a micro base station for a local hot spot (Mehravari teaches Antenna 620 radiates and receives wireless communications signals to and from Wireless Devices 230, as shown in Fig. 4 and described in Paragraphs [0059,0060]).

18. In regards to Claim 15, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 14, wherein said local hot spot conforms substantially to the IEEE 802.11 standard (Mehravari teaches Antenna 620 communicating with Wireless Devices 230 using the IEEE 802.11 protocol, as described in Paragraph [0059, 0060, 0064]).

19. In regards to Claim 16, the combination of Mehravari and Perlman teach the TV receiver installation of Claim 9, being a rooftop installation (Mehravari teaches Satellite

Dish 518, Antenna 620, and Satellite Transceiver 519 can be installed on a rooftop, as described in Paragraphs [0049,0059] and shown in Fig. 4).

20. In regards to Claim 17, Mehravari teaches a user satellite TV receiver installation comprising a satellite receiver dish (Satellite Dish Receiver 518 receiving information from Satellite 517, as shown in Fig. 4 and described in Paragraph [0049], with further reference to Paragraph [0022]), a single cable connection for reaching a set top box at a user's premises (connection between Satellite Transceiver 519 and First Communications Device 580 that communicates television services, as shown in Fig. 4 and described in Paragraphs [0049,0057]), and a terrestrial antenna suitable for broadcasting terrestrial wireless WAN signals (Antenna 620 of Fig. 6 that radiates and receives communications signals to and from Wireless Devices 230 in a high-speed wires wide-area or neighborhood system, as disclosed in Paragraphs [0059,0060]. In addition, Antenna can be affixed in various locations around the user's location, as disclosed in Paragraph [0059]). Mehravari teaches Satellite Transceiver 519, connected to Satellite Dish 518, for transmitting and receiving information in communication with two-way high speed data service provided by Satellite Infrastructure 505, as disclosed in Paragraphs [0049,0050].

Mehravari does not teach a method for modifying the user satellite TV receiver installation by connecting a single splitter combiner unit to said satellite receiver dish, said terrestrial antenna and said single cable connection, to combine incoming signals

from said satellite receiver dish and said terrestrial antenna onto said single cable connection and to split outgoing signals and direct them to said terrestrial.

In a similar field of invention, Perlman teaches an antenna assembly for receiving satellite signals and teaches a wireless communications transceiver that operates to transmit and receive video and data information within a surrounding area (Abstract). Perlman further teaches the communication of both satellite and terrestrial signals along the same Cable 20, as shown in Fig. 6 and described in Paragraph [0043]. Perlman also teaches the terrestrial antenna (Wireless Antenna 111 of Fig. 8) and the satellite receiver (elements 15, 16, 18, and 21 of Fig. 8) can be spliced into Cable 20 by way of Distribution Box 110, which acts as a splitter combiner unit (as shown in Fig. 8 and described in Paragraphs [0033,0034]; with further reference to Fig. 1 and Paragraphs [0024,0028,0029]).

Both Mehravari and Perlman teach devices for receiving both terrestrial and satellite communication signals (Satellite Transceiver 519 and Distribution Box 110, respectively) for transmitting and receiving information over the same cable (as described above). Perlman demonstrates the use of a terrestrial antenna and a satellite dish for providing both a video broadcast multi-channel feed and a bi-directional terrestrial signal from separate devices associated by the same cable. In view of Perlman's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the similar teachings of Mehravari to include a terrestrial antenna and a satellite receiver on the same cable in order to reduce the cost of the

over system by providing the data from each device to the same splitter combiner unit for transmitting through the same cable.

21. In regards to Claim 18, the combination of Mehravari and Perlman teach the method of Claim 17, further comprising connecting WAN support electronics at a far end of said single cable connection for allowing said terrestrial antenna to function as a WAN node (Mehravari teaches Access Point 550 supporting communications through Antenna 620, as disclosed in Paragraphs [0052,0053,0058,0059,0061,0064]).

22. In regards to Claim 20, the combination of Mehravari and Perlman teach the method of Claim 17, further comprising connecting hotspot support electronics at a far end of said single cable for allowing said terrestrial antenna to function as a micro base station for a wireless hotspot (Mehravari teaches Access Point 550 supporting communications through Antenna 620 to Wireless Devices 230, as disclosed in Paragraphs [0052,0053,0058,0059,0060,0061,0064]).

23. In regards to Claim 21, the combination of Mehravari and Perlman teach the method of Claim 20, wherein said hotspot support electronics is sufficient for supporting the IEEE 802.11 standard (Mehravari teaches Antenna 620 communicating with Wireless Devices 230 using the IEEE 802.11 protocol, as described in Paragraph [0059, 0060, 0064]).

24. In regards to Claim 22, the combination of Mehravari and Perlman teach the method of Claim 18, comprising connecting a residential gateway at a far end of said single cable, said residential gateway comprising interfaces for at least one of a set top box, a voice over IP device, an Internet device, thereby to allow devices connected to

said interfaces or said LAN to be able to receive and send signals via said modified receiver (Mehravari teaches High Speed Modem 555 for connecting Internet devices, such as Second Communications Device 585 that receives high-speed data services, as disclosed in Paragraphs [0052-0054,0057]).

25. In regards to Claim 23, the combination of Mehravari and Perlman teach the method of Claim 18, further comprising connecting an Ethernet port at a far end of said single cable, said Ethernet port being able to support a plurality of communication devices to send and receive signals via said modified receiver (Perlman teaches the use of Ethernet for providing a data interface for two-way communications, as described in Paragraph [0040]).

26. In regards to Claim 24, the combination of Mehravari and Perlman teach the method of claim 17, further comprising using Ethernet as a communication medium over said single cable (Perlman teaches the use of Ethernet for providing a data interface for two-way communications, as described in Paragraph [0040]).

27. In regards to Claim 25, Mehravari teaches a TV receiver installation comprising, a satellite receiver for receiving a broadcast multi-channel feed from a satellite relay (Satellite Dish Receiver 518 receiving information from Satellite 517, as shown in Fig. 4 and described in Paragraph [0049], with further reference to Paragraph [0022]), and a terrestrial antenna (Antenna 620 of Fig. 6 that radiates and receives communications signals to and from Wireless Devices 230 in a high-speed wires wide-area or neighborhood system, as disclosed in Paragraphs [0059,0060]). In addition, Antenna

can be affixed in various locations around the user's location, as disclosed in Paragraph [0059]). Mehravari teaches Satellite Transceiver 519, connected to Satellite Dish 518, for transmitting and receiving information in communication with two-way high speed data service provided by Satellite Infrastructure 505, as disclosed in Paragraphs [0049,0050].

Mehravari does not teach the satellite receiver for handling a return link over a terrestrial network, wherein said satellite and said terrestrial receivers of said rooftop installation are each connected to a single connecting cable to connect both said receiver and said antenna from said rooftop to an interior of a building.

In a similar field of invention, Perlman teaches an antenna assembly for receiving satellite signals and teaches a wireless communications transceiver that operates to transmit and receive video and data information within a surrounding area (Abstract). Perlman further teaches the communication of both satellite and terrestrial signals along the same Cable 20, as shown in Fig. 6 and described in Paragraph [0043]. Perlman also teaches the terrestrial antenna (Wireless Antenna 111 of Fig. 8) and the satellite receiver (elements 15, 16, 18, and 21 of Fig. 8) can be spliced into Cable 20 by way of Distribution Box 110, which acts as a splitter combiner unit (as shown in Fig. 8 and described in Paragraphs [0033,0034]; with further reference to Fig. 1 and Paragraphs [0024,0028,0029]).

Both Mehravari and Perlman teach devices for receiving both terrestrial and satellite communication signals (Satellite Transceiver 519 and Distribution Box 110, respectively) for transmitting and receiving information over the same cable (as

described above). Perlman demonstrates the use of a terrestrial antenna and a satellite dish for providing both a video broadcast multi-channel feed and a bi-directional terrestrial signal from separate devices associated by the same cable. In view of Perlman's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the similar teachings of Mehravari to include a terrestrial antenna and a satellite receiver on the same cable in order to reduce the cost of the over system by providing the data from each device to the same splitter combiner unit for transmitting through the same cable.

28. Claims 4, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Mehravari and Perlman as applied to Claims 1, 9, and 18 respectively, as addressed above, and further in view of Reisman, United States Patent Application Publication (2004/0031058 A1, Of Record).

In regards to Claims 4, 12, and 19, the combination of Mehravari and Perlman teach the TV receiver installation and method of Claims 1, 9, and 18 respectively, but the combination does not teach wherein said terrestrial antenna and said return and forward links are adapted for the IEEE 802.16 standard or the IEEE 802.20 standard.

In a similar field of invention, Reisman teaches a transmission protocol referring to any form of "communication" or "transport", including connections to directly attached devices, local area networks (LANs), and wide area networks (WANs), which are adapted to IEEE 802.16 standard, as described in Paragraph [0085]).

Therefore, it would be obvious to one with ordinary skill in the art to modify Mehravari and Perlman with Reisman to include IEEE 802.16 standard, as taught by Reisman, so that all communication devices and connected networks would be compatible with each other.

Conclusion

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK A. RYAN whose telephone number is (571)270-5086. The examiner can normally be reached on Mon to Thur, 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/810,558
Art Unit: 2623

Page 15

/P. A. R./
Examiner, Art Unit 2623
Monday, September 15, 2008

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2623